

REMARKS/ARGUMENTS

Claims 1-15, 37-42 and 50-61 have been cancelled without prejudice, as these claims were non-elected in a restriction requirement. Claims 22, 23, 25, 35, 36, and 45 have also been cancelled. Claims 16-21, 24-34, 43-44, 46-49 are pending in the application, along with newly added Claims 62-96.

Claims 16 and 43 as amended are independent claims. Newly added Claim 62 is also an independent claim. Claims 17-21 and 24, 26-34, along with newly added Claims 76-85, are dependent claims depending on independent Claim 16 as amended. Claims 44 and 46-49, along with newly added Claims 86-96, are dependent claims depending on independent Claim 43 as amended. Newly added Claims 63-75 are dependent claims depending on newly added independent Claim 62.

The Examiner has objected to Claims 24 and 36 as allegedly being of improper dependent form. Claim 24 has been amended and Claim 36 has been cancelled without prejudice.

Claims 16-34, 36 and 43-49 were rejected by the Examiner under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regard as the invention. Independent Claims 16 and 43 have been amended to obviate the rejection under 35 U.S.C. § 112, second paragraph. More specifically, independent Claim 16 has been amended to claim *inter alia*:

.....removing at least a portion of the alcohol from the erythrocytic cells to produce erythrocytic cells having a phase transition when the produced erythrocytic cells have a temperature within a temperature range selected from a group of temperature ranges comprising a low phase transition temperature range, an intermediate phase transition temperature range, and a high phase transition temperature range; and....

More specifically further, independent Claim 43 as amended to claim *inter alia*:

.....removing at least a portion of the alcohol from the erythrocytic cells to produce erythrocytic cells having a phase transition when the produced erythrocytic cells have a temperature within a temperature range selected from a group of temperature ranges comprising at least three phase transition temperature ranges; and.....

With respect to the Examiner's allegations that "low phase transition temperature range," "intermediate phase transition temperature range," and "high phase transition temperature range" are vague, it is clear from the specification that a phase transition temperature is the temperature that a cell has a phase transition. Thus, by way of example, a "low phase transition temperature range" would be a low temperature range (e.g., a range of low temperatures) where the cell would have a phase transition. It is axiomatic that a claim may be read in light of the specification. The Examiner is respectfully reminded that a claim is not "indefinite" under 35 U.S.C. § 112, second

paragraph, simply because the claim may be hard to understand when viewed without benefit of the specification. *S3 Inc. v. nVIDIA Corp.*, 259 F.3d 1364, 59 U.S.P.Q. 2d 1745, 1748 (Fed. Cir. 2001). In the instant case, the terms "low phase transition temperature range," "intermediate phase transition temperature range," and "high phase transition temperature range" are not hard to understand, even when viewed without the benefit of the specification. Therefore, any rejection of the Claims under 35 U.S.C. § 112, second paragraph, should be withdrawn.

The Examiner has rejected Claims 16-36 and 43-49 under 35 U.S.C. § 112, first paragraph, because allegedly the specification only supports removing cholesterol and not generally an alcohol. The Examiner more specifically alleges that the ".....specification fails to provide adequate guidance and evidence for removing any type of alcohol other than cholesterol from erythrocytic cells before loading oligosaccharide....." The Examiner specifically states in the June 27, 2003 Office Action that:

".....one skilled in the art at the time of the invention would have to engage in undue experimentation to practice over the full scope of the invention claimed. This is particularly true given the nature of the invention, the state of the prior art, the breadth of the claims, the amount of experimentation necessary, the working examples provided and scarcity of guidance in the specification, and the unpredictable nature of the art."

Applicants have specifically disclosed removing alcohol from erythrocytic cells (e.g., see page 33, "...removing at least part of the alcohol (e.g., a steroid

alcohol, such as cholesterol) from the erythrocyte cells....."). Before allowing Applicants to generically claim "alcohol," the Examiner is demanding that Applicants run an experiment for each and every alcohol presently existing in this world to prove that by removing each and every alcohol existing in this world will produce erythrocytic cells having a phase transition when the produced erythrocytic cells have a temperature within a temperature range selected from a group of temperature ranges comprising at least three phase transition temperature ranges.

So the issue before the Examiner is: **Does 35 U.S.C. § 112 require disclosure of a test with every species covered by a claim?** The Court of Appeals for the Federal Circuit has held that 35 U.S.C. § 112 does not require disclosure of a test with every species (e.g., such as a test for each and every alcohol presently existing in this world) covered by a claim. More specifically, in the case of *In re Angstadt and Griffin* the Court of Appeals for the Federal Circuit has stated and held (through an adoption of C.C.P.A. decisions):

In an unpredictable art, does 35 U.S.C. § 112 require disclosure of a test with every species covered by a claim? To require such a complete disclosure would apparently necessitate a patent application with thousands of examples or a disclosure with thousands of catalyst along with information as to whether each exhibits catalytic behavior resulting in the production of the desired products. *More importantly, such a requirement would force an inventor seeking adequate patent protection to carry out a prohibitive number of actual experiments.*

This would tend to discourage inventors from filing patent applications in an unpredictable area since the patent claims would have to be limited to those embodiments that are expressly disclosed. A potential infringer could readily avoid "literal" infringement of such claims by merely finding another analogous catalyst complex that could be used in forming the same products. (emphasis added)

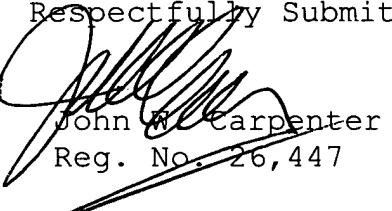
Therefore, Applicants are entitled to broadly claim "alcohol" without having to conduct experiments (i.e., perhaps millions of experiments) to prove that removing from erythrocytic cells each and every alcohol existing in this world will produce erythrocytic cells having a phase transition when the produced erythrocytic cells have a temperature within a temperature range selected from a group of temperature ranges comprising at least three phase transition temperature ranges. Applicants respectfully requests the Examiner to withdraw the rejection of the claims under 35 U.S.C. § 112, first paragraph.

Accompanying this Response is an Information Disclosure Statement, including PTO-1449 Form. Copies of all the references listed on the accompanying PTO-1449 Form may be found in copending related patent application having Application No. 09/828,627, filed April 5, 2001. The Examiner for this copending related patent application is Leon B. Lankford Jr. (art unit 1651). Applicants request that the Examiner consider the references listed on PTO-

1449 Form and return a signed copy of the PTO-1449 Form to
the undersigned attorney.

All Claims are now in condition for allowance and an
early notice of same is respectfully solicited.

Respectfully Submitted



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